IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.:	09/990,779	Confirmation No.: 3140
Appellant(s):	Jones et al.	
Filed:	November 14, 2001	
Art Unit:	2171	
Examiner:	Al-Hashemi, Sana A.	
Title:	SYSTEM AND METHOD FOR PROCESSING TRAVEL DATA IN A RELATIONAL DATABASE	

Docket No.:   043474/257910
Customer No.: 00826

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REVISED APPEAL BRIEF UNDER 37 CFR § 41.37

This Revised Appeal Brief is filed pursuant to the "Notice of Appeal to the Board of Patent Appeals and Interferences" filed December 19, 2005, and in response to the Notification of Non-Compliant Appeal Brief dated May 8, 2007. This Revised Brief supplements the Summary of Claimed Subject Matter section of the Appeal Brief filed March 20, 2006, to summarize each independent claim of the present application and to refer to the specification by page and line number, and the drawings if appropriate.

1.   ***Real Party in Interest.***

The real party in interest in this appeal is Travelocity.com LP, the assignee of the above-referenced patent application. Travelocity.com LP is currently a wholly-owned subsidiary of Sabre Inc.

2.   ***Related Appeals and Interferences.***

There are no related appeals and/or interferences involving this application or its subject matter.

3.   ***Status of Claims.***

Claims 1-45 are pending, all of which stand rejected and are being appealed.

4.   ***Status of Amendments.***

There are no unentered amendments in this application.

5.   ***Summary of Claimed Subject Matter.***

The present invention generally is directed to display of desired fares, such as a lowest fare, to a user based on a user query. The system of exemplary embodiments of the present invention receives a departure and destination from the user. Pat. Appl., page 14, paragraph 043. From this, the system determines a desired fare (or a set of desirable fares) between the departure and destination. *Id.* As is understood, a fare may apply to several itineraries for different times and even different days. The system seeks to organize the various options for the fare for the user. Specifically, the system displays the fare in a calendar based system indicating the departure and return days that the fare is available. This allows the user to more easily decide on which departure and returns days the desirable fare is available and may be booked.

More particularly, the system can construct possible itineraries between the departure and destination associated with the desirable fare or fares. Pat. Appl., page 14, paragraph 043. Due to the number of rules and restrictions associated with travel carriers, a set of rules can then be applied to the possible itineraries. *Id.* at page 15, paragraph 044. The system can query an

availability portion of a travel database for available travel units based upon the applied set of rules and the possible itineraries. *Id.* at pages 15-16, paragraphs 045-046. The available travel units can then be displayed in at least a portion of a calendar of a calendar-based user interface. *Id.* at page 16, paragraph 047; and pages 19-20, paragraphs 055-056.

The calendar of the calendar-based user interface can include one or more tabular registers representing one or more months, where each tabular register includes a plurality of cells representing the days of the month. Pat. Appl., pages 19-20, paragraphs 055-056, and FIG. 7 (illustrating the months of January, February and March). The availability of travel units can be displayed in the calendar may be displayed in the calendar based on any combination of shading, hyperlinks, symbols or other appropriate indicia. For example, first indicia (e.g., user-selectable hyperlink) can be displayed within one or more cells of the tabular register(s) to indicate one or more available travel units for the respective day of the month represented by the respective cell. Also, for example, second indicia (e.g., grayed out, shaded, etc.) can be displayed within one or more cells of the tabular register(s) to indicate nonavailability and/or nonapplicability of any travel units for the respective day of the month represented by the respective cell. Further, for example, third indicia (e.g., crossed-out) can be displayed within one or more cells of the tabular register(s) to indicate a sellout of all travel units for the respective day of the month represented by the respective cell. *Id.*

Independent Claim 1 recites a method for processing a query of a travel database. As recited, the method includes receiving a selected arrival location and a selected departure location, and finding a set of desirable fares between the arrival location and the departure location. Pat. Appl., page 6, paragraph 013; pages 14-15, paragraph 043; and FIG. 3, steps 300-303. The method also includes constructing possible itineraries between the arrival location and the departure location associated with the desirable fares. *Id.*, page 6, paragraph 013; pages 14-15, paragraph 043; and FIG. 3, step 304. A set of rules are applied to the possible itineraries, and an availability portion of the travel database is queried for available travel units based upon the applied set of rules and the possible itineraries. *Id.*, page 6, paragraph 013; page 15, paragraph 044 – page 16, paragraph 046; and FIG. 3, steps 306-316. The method then includes displaying

the available travel units in at least a portion of a calendar of a calendar-based user interface. *Id.*, page 6, paragraph 013; page 16, paragraph 047; and FIG. 3, step 318.

Independent Claim 7 recites an apparatus for processing a query of a travel database. As recited, the apparatus includes a memory for storing an application program, and a processor coupled to the memory and configured under control of the application program to perform a number of functions. Pat. Appl., FIG. 1; page 6, paragraph 013; pages 14-15, paragraph 043; and FIG. 3, steps 300-303. In this regard, the processor is configured to receive a selected arrival location and a selected departure location, and find a set of desirable fares between the arrival location and the departure location. *Id.*, page 6, paragraph 013; pages 14-15, paragraph 043; and FIG. 3, step 304. The processor is also configured to construct possible itineraries between the arrival location and the departure location associated with the desirable fares. *Id.*, page 6, paragraph 013; page 15, paragraph 044 – page 16, paragraph 046; and FIG. 3, steps 306-316. In addition, the processor is configured to apply a set of rules to the possible itineraries, and query an availability portion of the travel database for available travel units based upon the applied set of rules and the possible itineraries. *Id.* Further, the processor is configured to cause the available travel units to be displayed in at least a portion of a calendar of a calendar-based user interface. *Id.*, page 6, paragraph 013; page 16, paragraph 047; and FIG. 3, step 318.

Independent Claim 13 recites a calendar-based user interface for displaying query results from a database containing travel data. Pat. Appl., FIG. 7. As recited, the user interface includes a calendar showing a plurality of days corresponding to the query, and an availability indicator for each of the plurality of days showing available itineraries relating to the query. *Id.*, page 19, paragraph 055. Further, the user interface includes an applicability indicator for each of the plurality of days showing itineraries relating to the query which apply based on a set of rules and restrictions from travel providers. *Id.*

Independent Claim 20 recites a method for administering an availability portion of a relational travel database. Pat. Appl., FIG. 8. As recited, the method includes receiving an availability message from a first travel provider, and analyzing the availability message to determine one or more affected travel segments. *Id.*, page 6, paragraph 014; page 20, paragraph 057; and FIG. 8, steps 800-804. The method also includes querying a schedule portion of the

relational travel database for the one or more affected travel segments, and writing a record to an availability portion of the relational database based on a status portion of the availability message if the one or more affected travel segments are found in the schedule portion of the relational database. *Id.*, page 6, paragraph 014; page 20, paragraph 057 – page 21, paragraph 059; and FIG. 8, steps 806-812.

Independent Claim 26 recites an apparatus for administering an availability portion of a relational travel database. As recited, the apparatus includes a memory for storing an application program, and a processor coupled to the memory, operatively coupled to the relational travel database, and configured under control of the application program to perform a number of functions. Pat. Appl., FIGS. 1 and 8. In this regard, the processor is configured to receive an availability message from a first travel provider, and analyze the availability message to determine one or more affected travel segments. *Id.*, page 6, paragraph 014; page 20, paragraph 057; and FIG. 8, steps 800-804. In addition, the processor is configured to query a schedule portion of the relational travel database for the one or more affected travel segments, and write a record to an availability portion of the relational database based on a status portion of the availability message if the one or more affected travel segments are found in the schedule portion of the relational database. *Id.*, page 6, paragraph 014; page 20, paragraph 057 – page 21, paragraph 059; and FIG. 8, steps 806-812.

Independent Claim 32 recites a method for processing a query of a travel database. As recited, the method includes receiving a selected arrival location and a selected departure location, and finding a desirable fare between the arrival location and the departure location. Pat. Appl., page 6, paragraph 013; pages 14-15, paragraph 043; and FIG. 3, steps 300-303. The method also includes constructing possible itineraries between the arrival location and the departure location associated with the desirable fare, the possible itineraries being for a plurality of days of at least one month. *Id.*, page 6, paragraph 013; pages 14-15, paragraph 043; and FIG. 3, step 304. In addition, the method includes querying an availability portion of the travel database for available travel units for at least one day of the at least one month based upon the possible itineraries. *Id.*, page 6, paragraph 013; page 15, paragraph 044 – page 16, paragraph 046; and FIG. 3, steps 306-316. And further, the method includes displaying a calendar-based

user interface that includes a calendar displaying the dates that the desired fare is available. *Id.*, page 6, paragraph 013; page 16, paragraph 047; page 19, paragraph 055; FIG. 3, step 318; and FIG. 7.

Independent Claim 41 recites a method for displaying possible dates that a fare is available to a user. As recited, the method includes receiving a selected arrival location and a selected departure location, and finding a desirable fare between the arrival location and the departure location. Pat. Appl., page 6, paragraph 013; pages 14-15, paragraph 043; and FIG. 3, steps 300-303. The method also includes determining what departure dates and return dates that the fare is available, and displaying in a calendar the departure and return dates on which the fare is available. *Id.*, page 19, paragraph 055; and FIG. 7.

6. ***Grounds of Rejection to be Reviewed on Appeal.***

Currently, pending Claims 1-45 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,442,526 to Vance et al.

7. ***Argument.***

As explained below, Appellants respectfully submit that Claims 1-45 are patentably distinct from Vance. Accoridngly, Appellants resepctfully request that the aformentioned rejections be reversed.

A. The Vance Patent

As background, the Vance patent discloses a system and method for processing travel data and travel receipts. As disclosed, the system receives travel data that includes one or more travel segments. The system also receives receipts for the trip, which can be received from a credit card provider. The received travel data and receipts can be converted into a predefined format, with the converted information thereafter compared to match information in the travel data and receipts, such as by chain codes or dates of travel. Then, a list of matching data can be output, such as for use in preparing an expense report.

B.   Claims 1-12 are Patentably Distinct from the Vance Patent

Independent Claims 1 and 7 of the present application provide a method and apparatus for processing a query of a travel database. As recited, the method includes receiving a selected arrival and departure locations, and thereafter finding a set of desirable fares between the arrival and departure locations. Possible itineraries are constructed between the arrival and departure locations associated with the desirable fares. A set of rules are then applied to the possible itineraries. As explained in the specification, for example, one or more rules can include a minimum and/or maximum number of required stays, advanced purchase requirements or the like. Irrespective of the rules, however, the method further includes querying an availability portion of the travel database for available travel units (e.g., available seats of an aircraft) based upon the applied set of rules and the possible itineraries. Thereafter, the available travel units are displayed in at least a portion of a calendar of a calendar-based user interface.

As previously explained, in contrast to the method and apparatus of independent Claims 1 and 7, the Vance patent does not teach or suggest <u>displaying available travel units in a calendar-based user interface, or more particularly in at least a portion of a calendar of a calendar-based user interface</u>. The Vance patent does disclose a graphical user interface of a trip planning module, where the graphical user interface includes a calendar for displaying components of a trip planned by a user, such as by displaying a selected flight, hotel, and/or rental car. However, the graphical user interface of the Vance patent does not display available travel units (e.g., available seats), as does the claimed invention of independent Claims 1 and 7. Instead, the graphical user interface of the Vance patent displays only those components of a trip selected by the user.

With regard to Claims 1 and 7, the Official Action alleges that Figure 14D of the Vance patent discloses display of available travel units in a calendar. Appellants respectfully disagree. Figure 14D of Vance discloses the display of possible itineraries in a pop up window, not a calendar, as is recited in independent Claims 1 and 7. Appellants further note that none of the other figures of Vance teach display of available travel units in a calendar. For example, Figures 14 E, H, and K nowhere teach or suggest display of available travel units in a calendar. Instead, the aircraft icons in these figures represent flights that have been booked by the user, not flights

that are available. In this regard, Vance does not use a calendar as a tool for allowing the user to locate flights (travel units) that match a desired fare, but rather   Vance discloses the use of an electronic calendar for travel planning, but does not teach or suggest that the calendar may help the user identify the proper dates to travel to obtain the desired fare. Simply stated, in accordance with one embodiment of the invention of the present application, if the user has only $300 to spend on airfare, the user is presented with a calendar including the dates he/she can find available flights for just that price.

The Examiner may be inclined to think that these distinctions are trivial, but they are not. There is a fundamental difference between the claimed invention and the system of Vance. Vance is directed to displaying on a calendar flights and reservations after they have been booked. There is no discussion in Vance about the problems of displaying a fare that may be available for various departure and return dates to a user in a meaningful way. The claimed invention, on the other hand, realizes this issue and provides a solution by displaying the available dates for the fare in a calendar, so that the user can visually determine desired departure and return dates.

Generally, the calendar disclosed by the Vance patent provides an indication of reserved components of a travel itinerary, including an aircraft icon to indicate a flight reservation for a given day and a hotel icon for a hotel reservation for a given day (see FIG. 14K). Therefore, the Vance patent does not teach or suggest that the calendar includes an indication of whether a travel unit is allowed on a pre-specified day based on a set of rules, as further recited by dependent Claims 3 and 9. Similarly, the Vance patent does not teach or suggest that the calendar includes an indication of whether a travel unit is available and/or sold out, as recited by dependent Claims 4 and 10. Further, the Vance patent does not teach or suggest that the calendar includes user-selectable hyperlinks for selecting a desired travel date, as recited by dependent Claims 6 and 12 (reciting a display as including the respective elements, the display being of at least a portion of the calendar per dependent Claims 5 and 11).

Appellants therefore again respectfully submit that the method and apparatus of independent Claims 1 and 7, and by dependency Claims 2-6 and 8-12, are patentably distinct from the Vance patent.

C.   Claims 13-19 are Patentably Distinct from the Vance Patent

Independent Claim 13 of the present application recites a calendar-based user interface for displaying query results from a database containing travel data. The user interface includes a calendar showing a plurality of days corresponding to the query, and availability and applicability indicators for each of the days. As recited, the availability indicator for each day shows available itineraries relating to the query. The applicability indicator for each day, on the other hand, shows itineraries relating to the query that apply based on a set of rules and restrictions from travel providers.

In contrast to independent Claim 13, the Vance patent does not teach or suggest a user interface including a calendar, and an availability indicator for each day of the calendar that shows available itineraries relating to a query. Also, the Vance patent does not teach or suggest a user interface that includes an applicability indicator for each day of the calendar that shows itineraries that apply based on a set of rules and restrictions from travel providers. As explained above and in response to the first Official Action with respect to Claims 1-12, the Vance patent does disclose a graphical user interface including a calendar. The calendar of the Vance patent, however, displays components of a trip planned by a user, such as by displaying a reserved flight, hotel, and/or rental car. The calendar of the Vance patent does not display, for each day, available fares relating to a query or itineraries related to the query that apply based on a set of rules and restrictions from travel providers, as recited by independent Claim 13.

The Vance patent does disclose a graphical user interface that shows a listing (not a calendar) of a number of flights between selected origination and destination locations (see FIG. 14D) including the availability of those flights. However, even the listing only shows those flights for a single date (see FIG. 14C), and not for each date of a calendar, as recited by independent Claim 13.

Thus, Appellants again respectfully submit that the user interface of independent Claim 13, and by dependency Claims 14-19, is patentably distinct from the Vance patent.

D. Claims 20-31 are Patentably Distinct from the Vance Patent

Independent Claims 20 and 26 recite a method and apparatus for administering an availability portion of a relational travel database. As recited, the method includes receiving an availability message from a first travel provider. The availability message is then analyzed to determine one or more affected travel segments. A schedule portion of the relational travel database is queried for the one or more affected travel segments. Thereafter, if the one or more affected travel segments are found in the schedule portion of the relational database, a record is written to an availability portion of the relational database based on a status portion of the availability message.

In contrast to independent Claims 20 and 26, the Vance patent does not teach or suggest a method or apparatus for administering an availability portion of a relational travel database, much less such a method or apparatus that includes receiving an availability message, analyzing the availability message, and writing a record to the availability portion of the relational database. The Official Action alleges that by disclosing the BargainFinderPlus feature of the Vance patent (see FIGS. 14P-14S), the Vance patent discloses analyzing an availability message to determine one or more affected travel segments, querying a schedule portion of a relational travel database for the affected travel segment(s), and writing a record to an availability portion of the relational database based on a status portion of the availability message if affected travel segment(s) are found in the schedule portion.

Appellants respectfully submit, however, that instead of disclosing a technique for administering an availability portion of a relational travel database, the Vance patent discloses a feature that permits a user to search for flights priced lower than a selected flight. Vance Patent col. 12, ll. 6-20. If the user then desires to select a lower priced flight, the Vance system updates the user's travel log to reflect the changed flight. In this regard, as the user searches for lower priced flights based on a flight already selected, and receives a list of available lower priced flights, the BargainFinderPlus feature of the Vance patent cannot be considered a technique for administering the availability portion of a relational travel database, as does the claimed invention of independent Claims 20 and 26. More particularly, for example, the BargainFinderPlus feature cannot be considered to include receiving an availability message

from a travel provider, the availability message then being analyzed to determine one or more affected travel segments. In this regard, any messages in the BargainFinderPlus feature of the Vance patent are received from the user, although in that instance the user is searching for lower priced flights, and not available flights since the user has already selected an available flight (that being compared for lower priced flights).

As the Vance patent does not teach or suggest a method or apparatus for administering an availability portion of a relational travel database, Appellants again respectfully submit that the invention of independent Claims 20 and 26, and by dependency Claims 21-25 and 27-31, is patentably distinct from the Vance patent.

E.   Claims 32-45 are Patentably Distinct from the Vance Patent

Appellants further respectfully submit that the methods of independent Claims 32 and 41 are patentably distinct from the Vance patent. Claims 32 and 41, albeit somewhat different language, recite that the system displays in a calendar the dates that a given fare is available. This is no where taught or suggested by the Vance patent. Specifically, Figure 14D does not teach or suggest this aspect. First, Figure 14D does not disclose displaying fares at all. It only discloses display of itineraries for a given departure return date. There is no mention of the fare associated with the itineraries. Second, it does not disclose display of a fare in a calendar. The itineraries are in a pop up window. Finally, Figure 14D does not disclose display in a calendar all of the dates that the fare is available. At best, Figure 14D only shows itineraries for a given departure-return date combination selected by the user. *See* Figure 14C. This is very different from the claimed invention, where a desired fare is displayed in a calendar to show all the dates that the fare available. Because in Vance, the user inputs a specific departure-return date combination, see Figure 14C, there is no way that Vance teaches or suggests display of all the dates that a desired fare is available.

As discussed earlier, none of the other figures or their corresponding text discloses display in a calendar the days that a desired fare is available. Figures E, H, and K only show a particular itinerary that has already been selected by a user. It does not display various dates that a fare is available.

Appellants reiterate here that there is a big difference between Vance and the claimed invention. Vance displays itineraries for a user based on a specific departure-return date combination. In this environment, the display is not so complex as to not be discernable by a user. The claimed invention, however, is concerned with displaying a desired fare to a user and indicating all of the dates that that fare may be available. A fare may have a large number of itineraries associated therewith for different departure-return date combinations. To accomplish this, the claimed system displays graphically in a calendar the days that the fare is available, which allows the user to more readily decide which dates to select for departure and return.

Appellants respectfully submit that independent Claims 32 and 41, and by dependency Claims 33-40 and 42-45, are patentably distinct from the Vance patent.

8.   *Claims Appendix.*

The claims currently on appeal are as follows:

1.   (Previously Presented) A method for processing a query of a travel database, comprising:

receiving a selected arrival location and a selected departure location;

finding a set of desirable fares between the arrival location and the departure location;

constructing possible itineraries between the arrival location and the departure location associated with the desirable fares;

applying a set of rules to the possible itineraries;

querying an availability portion of the travel database for available travel units based upon the applied set of rules and the possible itineraries; and

displaying the available travel units in at least a portion of a calendar of a calendar-based user interface.

2.   (Original) The method of claim 1, wherein the calendar-based user interface displays applicability data and availability data simultaneously.

3.   (Original) The method of claim 2, wherein applicability data comprises an indication of whether a travel unit is allowed on a prespecified day based on the set of rules.

4.   (Previously Presented) The method of claim 2, wherein the availability data comprises an indication of whether a travel unit is at least one of (1) available for sale or (2) sold out.

5.   (Previously Presented) The method of claim 2, wherein the calendar-based user interface comprises a display of the calendar.

6.   (Original) The method of claim 5, wherein the display further includes user-selectable hyperlinks for selecting a desired travel date.

7.   (Previously Presented) An apparatus for processing a query of a travel database, comprising:

a memory for storing an application program; and

a processor coupled to the memory, the processor configured under control of the application program to:

receive a selected arrival location and a selected departure location,

find a set of desirable fares between the arrival location and the departure location,

construct possible itineraries between the arrival location and the departure location associated with the desirable fares,

apply a set of rules to the possible itineraries,

query an availability portion of the travel database for available travel units based upon the applied set of rules and the possible itineraries, and

cause the available travel units to be displayed in at least a portion of a calendar of a calendar-based user interface.

8.   (Original) The apparatus of claim 7, wherein the calendar-based user interface displays applicability data and availability data simultaneously on a display unit.

9.   (Original) The apparatus of claim 8, wherein applicability data comprises an indication of whether a travel unit is allowed on a prespecified day based on the set of rules.

10.   (Previously Presented) The apparatus of claim 8, wherein the availability data comprises an indication of whether a travel unit is at least one of (1) available for sale or (2) sold out.

11.   (Previously Presented) The apparatus of claim 8, wherein the calendar-based user interface comprises a display on the display unit of the calendar.

12.   (Original) The apparatus of claim 11, wherein the display further includes user-selectable hyperlinks for selecting a desired travel date.

13.   (Original) A calendar-based user interface for displaying query results from a database containing travel data comprising:

a calendar showing a plurality of days corresponding to the query;

an availability indicator for each of the plurality of days showing available itineraries relating to the query; and

an applicability indicator for each of the plurality of days showing itineraries relating to the query which apply based on a set of rules and restrictions from travel providers.

14.   (Original) The user interface of claim 13, wherein the availability indicator comprises a shaded day within the calendar for indicating whether a travel unit is available on the shaded day.

15.   (Original) The user interface of claim 13, wherein the availability indicator comprises an availability icon associated with a day within the calendar for indicating whether a travel unit is available on the associated day.

16.   (Original) The user interface of claim 13, wherein the availability indicator comprises a user-selectable hyperlink associated with a day within the calendar for indicating whether a travel unit is available on the associated day.

17.   (Original) The user interface of claim 13, wherein the applicability indicator comprises a shaded day within the calendar for indicating whether a travel unit is applicable on the shaded day.

18.   (Original) The user interface of claim 13, wherein the applicability indicator comprises an applicability icon associated with a day within the calendar for indicating whether a travel unit is applicable on the associated day.

19.   (Original) The user interface of claim 13, wherein the applicability indicator comprises a user-selectable hyperlink associated with a day within the calendar for indicating whether a travel unit is applicable on the associated day.

20.   (Original) A method for administering an availability portion of a relational travel database, comprising:

    receiving an availability message from a first travel provider;

    analyzing the availability message to determine one or more affected travel segments;

    querying a schedule portion of the relational travel database for the one or more affected travel segments; and

    writing a record to an availability portion of the relational database based on a status portion of the availability message if the one or more affected travel segments are found in the schedule portion of the relational database.

21.   (Original) The method of claim 20, further comprising:

    initializing the relational travel database by processing a snapshot of existing availability messages at a predetermined time into the availability portion of the relational travel database.

22.   (Original) The method of claim 20, further comprising:

    placing the availability message in a queue corresponding to the first travel provider.

23.   (Original) The method of claim 22, further comprising:

    processing the availability message corresponding to the first travel provider in parallel with an additional availability message corresponding to a second travel provider.

24.   (Original) The method of claim 20, further comprising:

adding the availability message to an alternative processing queue if the one or more affected travel segments are not found in the schedule portion of the relational database.

25.   (Original) The method of claim 20, further comprising:

determining one or more travel legs corresponding to each of the one or more affected travel segments, including an origin leg and a destination leg;

determining a leg number for each of the one or more travel legs; determining a first leg and a last leg associated with each of the one or more affected travel segments;

identifying affected travel segments whose leg number of the first leg is at least the leg number of the origin leg and whose leg number of the last leg is at most the leg number of the destination leg; and

writing a record to the availability portion of the relational database based on a status portion the availability message for each identified affected travel segment.

26.   (Original) An apparatus for administering an availability portion of a relational travel database, comprising:

a memory for storing an application program; and

a processor coupled to the memory and operatively connected with the relational travel database, the processor configured under control of the application program to:

receive an availability message from a first travel provider,

analyze the availability message to determine one or more affected travel segments,

query a schedule portion of the relational travel database for the one or more affected travel segments, and

write a record to an availability portion of the relational database based on a status portion of the availability message if the one or more affected travel segments are found in the schedule portion of the relational database.

27.   (Original) The apparatus of claim 26, wherein the processor is further configured to:

initialize the relational travel database by processing a snapshot of existing availability messages at a predetermined time into the availability portion of the relational travel database.

28.   (Original) The apparatus of claim 26, wherein the processor is further configured to:

place the availability message in a queue corresponding to the first travel provider.

29.   (Original) The apparatus of claim 28, wherein the processor is further configured to:

process the availability message corresponding to the first travel provider in parallel with an additional availability message corresponding to a second travel provider.

30.   (Original) The apparatus of claim 26, wherein the processor is further configured to:

add the availability message to an alternative processing queue if the one or more affected travel segments are not found in the schedule portion of the relational database.

31.   (Original) The apparatus of claim 26, wherein the processor is further configured to:

determine one or more travel legs corresponding to each of the one or more affected travel segments, including an origin leg and a destination leg;

determine a leg number for each of the one or more travel legs;

determine a first leg and a last leg associated with each of the one or more affected travel segments;

identify affected travel segments whose leg number of the first leg is at least the leg number of the origin leg and whose leg number of the last leg is at most the leg number of the destination leg; and

write a record to the availability portion of the relational database based on a status

portion the availability message for each identified affected travel segment.

32.   (Previously Presented) A method for processing a query of a travel database,

comprising:

receiving a selected arrival location and a selected departure location;

finding a desirable fare between the arrival location and the departure location;

constructing possible itineraries between the arrival location and the departure location

associated with the desirable fare, the possible itineraries being for a plurality of days of at least

one month;

querying an availability portion of the travel database for available travel units for at least

one day of the at least one month based upon the possible itineraries; and

displaying a calendar-based user interface that includes a calendar displaying the dates

that the desired fare is available.

33.   (Previously Presented) The method of claim 32, wherein the calendar-based user

interface comprises at least one tabular register representing the at least one month, each tabular

register including a plurality of cells representing the plurality of days of the month, and wherein

the displaying step comprises displaying first indicia within at least one cell of the at least one

tabular register, the first indicia indicating at least one available travel unit for the respective day

of the month represented by the respective cell.

34.   (Previously Presented) The method of claim 33, wherein the displaying step

further comprises displaying second indicia within at least one cell of the at least one tabular

register, the second indicia indicating at least one of an nonavailability or nonapplicability of any

travel units for the respective day of the month represented by the respective cell.

35.   (Previously Presented) The method of claim 33, wherein the displaying step

further comprises displaying third indicia within at least one cell of the at least one tabular

register, the third indicia indicating a sellout of all travel units for the respective day of the month represented by the respective cell.

36.   (Previously Presented) The method of claim 33, wherein the first indicia comprises a user-selectable hyperlink for selecting the respective day of the month represented by the respective cell.

37.   (Previously Presented) The method of claim 32, wherein the receiving step comprises receiving a selected arrival location and a selected departure location independent of at least one of a departure date or an arrival date, and wherein the finding and constructing steps comprise finding a desirable fare and constructing possible itineraries between the arrival location and the departure location for a plurality of at least one of departure dates or arrival dates.

38.   (Previously Presented) The method of claim 32, wherein the desirable fare comprises a lowest fare between the arrival location and the departure location.

39.   (Previously Presented) The method of claim 32, further comprising:
applying a set of rules to the possible itineraries,
wherein the querying step comprises querying the availability portion further based upon the applied set of rules.

40.   (Previously Presented) The method of claim 38, wherein the set of rules includes at least one of minimum required stays, maximum allowed stays, and advanced purchase requirements.

41.   (Previously Presented) A method for displaying possible dates that a fare is available to a user, comprising:
receiving a selected arrival location and a selected departure location;

finding a desirable fare between the arrival location and the departure location;

determining what departure dates and return dates that the fare is available; and

displaying in a calendar the departure and return dates on which the fare is available.

42.   (Previously Presented) The method according to Claim 41, wherein said determining step comprises:

constructing possible itineraries between the arrival location and the departure location associated with the desirable fare, the possible itineraries being for a plurality of days of at least one month;

querying an availability portion of the travel database for available travel units for at least one day of the at least one month based upon the possible itineraries; and

displaying in a calendar the dates that the desired fare is available.

43.   (Previously Presented) The method of claim 41, wherein the receiving step comprises receiving a selected arrival location and a selected departure location independent of at least one of a departure date or an arrival date, and wherein the determining step comprise finding a desirable fare and constructing possible itineraries between the arrival location and the departure location for a plurality of at least one of departure dates or arrival dates.

44.   (Previously Presented) The method of claim 41, wherein the desirable fare comprises a lowest fare between the arrival location and the departure location.

45.   (Previously Presented) The method of claim 42, further comprising:

applying a set of rules to the possible itineraries,

wherein the querying step comprises querying the availability portion further based upon the applied set of rules.

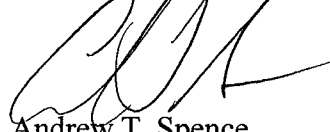9.   ***Evidence Appendix.***

None.

10.   ***Related Proceedings Appendix.***

None.

CONCLUSION

For at least the foregoing reasons, Appellants respectfully request that the rejections be reversed.

Respectfully submitted,

Andrew T. Spence
Registration No. 45,699

CUSTOMER NO. 00826
ALSTON & BIRD LLP
Bank of America Plaza
101 South Tryon Street, Suite 4000
Charlotte, NC 28280-4000
Tel Charlotte Office (704) 444-1000
Fax Charlotte Office (704) 444-1111

ELECTRONICALLY FILED USING THE EFS-WEB ELECTRONIC FILING SYSTEM OF THE UNITED STATES PATENT & TRADEMARK OFFICE ON MAY 16, 2007.

LEGAL01/4794137v2